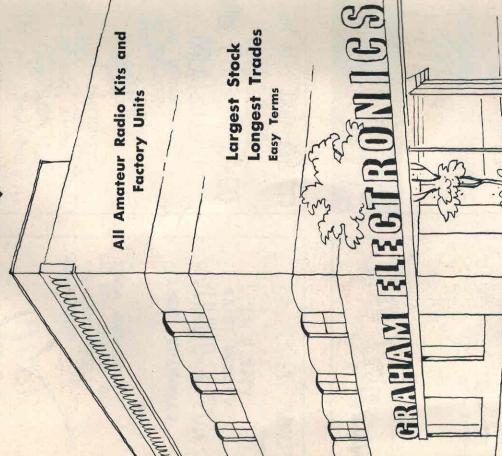
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ama Chewer

AUGUST 1960

PUBLISHED BY INDIANAPOLIS RADIO CLUB, INC. FOUNDED 1916



INDIANAPOLIS RADIO CLUB, INC. 2223 E. 74th Street Indianapolis 20, Indiana

F

Robert Caskey W9DNQ 2355 Stuart St. Indianapolis, Ind.



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located at 29th and Harding Streets. Meetings start promptly Friday of each month at the Indianapolis Park Board Building The Indianapolis Radio Club meets on the 2nd and 4th at 8:00 P.M., Indianapolis time.

AMA-CHEWER STAFF

	K9IUH VI 5-6191	K9EUQ CL 3-2220	W9JJC TR 8-8331	R. Osterhous W9PSE E. Ward K9CRS H. Wolfla K9LZJ	W9EJW	W9SWD W9JZV	W9JVF	
AMA-CHEWER STAFF	Ben Marcel 1130 Birnam Woods Trail	Pat Husk 2223 East 74th Street	Alvey Pittman 2555 West 71st St.	B. Brouse K9JSF R. Caskey W9DNQ H. L. Easley K9QDR	Frank Fitch	SORS Cliff Singer D.McVickers	Ron Williams	***
	EDITOR	PUBLISHER	MANAGER	REPORTERS	PHOTOGRAPHER	TECHNICAL ADVISORS	COVER STROY	

Ama-Chewer is published monthly by and for I.R.C. and all Amateurs in this area. Non-Members of I.R.C. may subscribe at the rate of \$1.00 per year. Publication is on the 3rd Friday of each month, with all news items and ads due no later than the 1st Friday of each month,

Ham-Ads (5 line limit) are free to members and subscribers, Others may use this facility at the rate of 50 cents per ad.

coming events of other clubs in the area for publication in Ama-Chewer welcomes the forwarding of information on the program section.

PROGRAM SCHEDULE

There will be no meetings during July and August as is the usual custom of IRC.	Interstate Sideband Net Picnic Pokagon State Park a few miles north of Angola, Indiana on Road #27. Come early Sunday, bring your basket dinner. All Amateur operators and their families are invited.	VHF picnic, Wabash Valley Amateur Radio Association. Sunday, Turkey Rund State Park.
July & August	July 24	July 31

September 10 & 11 Central Division ARRL Convention, Clay-pool Hotel, Indianapolis.

9 Business Meeting and Pre-Convention Bull Session for visitors.

September 23

September

On our first program night, we have Mr. Robert Atherton, Semi-conductor Design engineer at Naval Avionics Facility to give us some more information on transistors. Bob will cover circuits and their practical application,

NOTICE OF RADIO OPERATOR EXAMINATIONS

INDIANAPOLIS, INDIANA Commercial Examinations August 18, 1960-9:00 A.M.

Room 526, Federal

Building

Amateur examinations
August 19, 1960-9:00 A. M.

Must be completed by 2:00 P.M.

FIELD DAY TROUBLES

Guess the Home Brew Club had generator trouble but they were prepared and proceeded to hook up their spare generator—only trouble was it happened to be a D.C. generator—POW—did they start looking for the fuses.....

PROGRAM REVIEW

June 10th, Fritz Manning, W9VPN, gave an excellent program on quad antennas and showed a professional looking movie of the erection of his windmill tower and tri-band quad antenna.

Fritz explained how a regular high Q beam deteriorated at a height of 10,000 feet at a South American location which began the development of the quad antenna in about 1939.

A single loop quad antenna has a feed impedence of 144 ohms and the gain is the same as a regular dipole antenna. With a double loop the impedence is about 300 ohms. For a 2 element quad with a reflector spaced .1 to .2 wave, the gain is 5.7 DB and a 3 element quad has a 7.2 DB gain over a dipole. The quad has a very low angle of radiation and can be fed to give either vertical or horizontal polarization.

The element lenghts of a quad equal 1.25 times the free space wavelength or, one quarter wave equal 257x (Freq. Mc.

The feed impedence of a tri-band single loop quad is: 20 meter, 75 ohm; 15 meter, 120 ohm; 10 meter, 140 ohm.

Fritz recommended a six meter quad be tuned at approximately 50.1 Mc and it would give about 4 DB gain at frequencies up to 52 - 53 Mc.

I am sure all who attended would agree if you have a question on a quad antenna you better ask a regular IRC member, Fritz Manning, W9VPN.

SPLATTER

Angus W9CYQ, Forbes, W9HNS, Alvey, W9JJC, left Saturday, July 2 for a 2 week cruise on the SS Angus. They left Grand Haven, Sunday and are having daily schedules with Ed Healy, W9FJR on 40 to keep in touch. Their plans are to go to Beaver Island and perhaps MacKinac, stopping at Ludington, Frankfort, South Manitou Island, Charlevoix and Harbor Springs. Alvey is going to be cook so....! (Hope everyone survives-(Ed.).

BEST WISHES FOR A SPEEDY RECOVERY

One of the active Field Day operators, Dick Shimer, K9VDI, had the misfortune of falling off a four story building. He broke both legs and cracked some vertabre, His address for some months to come will be Room 437, Community Hospital. Dick has his Communicator III on the air out there and can be heard over most of the city. Look for him on 6 and 1f possible drop in for an eyeball 1 to 8 PM anyday.

Dick Siegle brought out a Communicator III power plug from Graham's (no charge) and Ron, W9JVF installed a dipole which works pretty well considering its inside a metal frame building to help Dick get on the air.

OSL BUREAU

Some how—about 5 years ago we got real noble and wrote the W9 QSL Bureau—with a list of Marion County calls and said we would get rid of any they might be holding. It cost \$2.29 postage to get them down here! We got rid of about 80% of them finally, but anyway in a weak moment Esther got me to clean up the basement last week—and there was still some of those #%\$¢&¢*\$QSL's. Sooo—ABV, AFD, BOG, BPO, BNN, CGJ, EKM, EON, EUM, FWJ, FVI, FFB, FLD, FKG, GPV, GHF, GHV, GND, HTB, IV, IRO, JRK, JBK, KDD, KFH, MPR, OSL, SGH, SEL, QUL, VQD, PMM, UMI, ZHS. You all give me a call, come out, or send me an envelope. They're real antiques, about 1950. Get on the good side of Esther and help me clean up.

Alvey, W9IJC TR 8-8331

SPLATTER

Rickey, K9KSP, has a new ? car. He thinks it is a new T-Bird but it looks like a 52 Chevy to most of the rest

IRC IS YOUR CLUB, SUPPORT IT, ATTEND MEETINGS

COVER STORY

dipole beam on Taflingers prop pitch motor tower is up - Mac's the pipe doesn't fit - a quick trip to the store for smaller pipeanchors are 5' too far out, up they come & in they go - its up! doubt. The food - signs - gasoline - wire - etc. ?? Two cars trip for 15 gallons of gas - then ice - cokes - more cokes and how many rigs - whose beam can we use, where will we go in with their set up, K9GEE's shinny tribander goes togetherup - up cameras clicking - a couple of hearts beating quicker drive up - another - a tent goes up - the 80 meter gang drive JZV 6 meter beam is up - 80 is up - lets go man-lets go-its In January you start getting on the Chief Operator for FD grub. Hank, K9LZJ is still bubbling over - after Friday night pictures - the 40 meter antenna & gamma are up - a 15 meter plans - He gets on you - you argue high power, low powerit's on the 100' tower - the tower starts up - it's not level-down again and move it to a better spot. The 3 guy wire Ain't it pretty . . . My God the slack in the coax at the top is gone - its taut and 100' away! Easley K9QDR climbs it then he's back safe on the ground calmer than any of us! A it looks better. Then at 0700 Saturday 24 June your still in then the 1st of June rolls around - it looks all fouled up -In his tent on the site to watch the gear already out at the Fair Grounds. Frank W9EJW recording the whole thing in

Ron Rush, W9TGH & Hank, K9LZJ take off on 80 SSB with the Heath twdns (Hank gets a case of "Idiot Control Fright")—
Bob Good, K9PPB, Gary Hughes, K9LNX, Bob Osterhous, W9PSI and visitor Ed White, K8EZQ from Jackson Michigan cover 40 mostly CW. Rickey K9KSP hammers away at 15 with his Heath Mobile twins with Kinnett doing the logging. The club gooney box ground away on 6 with Pat, K9EUQ starting the show & Bill K9UHW, Ken Brabec, K9SGV and a whole raft of others helping. 20 was in the other trailer with Ed Healy FJR, Dick Hickok K9PUI, in the drivers seats along with Jack Wells. Frank Black W9MNA, reported everything was coming in on TWO at the same good looking 2 meter beam any way.

You should have seen the 20 meter trailer when to many crowded in the aft end and the front went up in the air! Every body tumbled out and it came down out of orbit again without harm.

It was our biggest and best F.D., the cooperation was the best, the location at the Fair Grounds by the 4H building was ideal, the equipment was swell, antennas very good & the scorwas better than last year. (continued on page 7)

LETTER OF THE MONTH (or Music for Editors to Dream With)

410 N.W. 117th Street Miami 50, Florida

Editor and Staff the Ama-Chewer:

It has been several years since I have had the pleasure to read the Ama-Chewer, and even more years since I was associated with IRC. Recently, while vacationing in Indianapolis for the 500 amazement to see such a professional type publication with mile race, my wife and I called on our good friends Martha 1960 issue of the Ama-Chewer. You can well imagine my the long sought after advertisements, cover stories, picand John Lee, W9GRE, and I was presented with the May tures, feature stories, and of course the necessary and informative splatter.

some years ago, and the equally fine work by Butch Singer, only too well the long taskful hours put in by Bob Caskey Regarding the Ama-Chewer of yesteryear, I remember whose untiring efforts has undoubtly set a precedent on which the current Ama-Chewer is based. You are to be commended on your striving progress, and that state of perfection the Ama-Chewer has achieved,

most of our Ham friends there. Through the Ama-Chewer we could keep posted on all current events, and I would like to again subscribe to the Ama-Chewer. Enclosed please find Since leaving Indianapolis we have lost contact with my check to cover the subscription fee.

say hello. I promise to answer each and every one received It would be interesting to learn how many of my friends hearing from them. How about dropping me a QSL card to read or see this letter, and I would very much appreciate

Again, congratulations to the Ama-Chewer staff on a job

James R. Whitmore,

W9ZUU/4

Best regards,

COVER STORY (continued from page #5)

The man at the White Castle didn't believe me at first when I ordered 40 hamburgers! How can you thank everyone who helped - equipment, labor, operators. Old McVickers our chief operator kept calm thru it all. If we omit any names we certainly don't want too but it was hard to work and be a reporter too. (reporters don't normally work!)

twins & SB-10; Brouse 6 Meter VFO; Frank Black SX1100; Bill Hughes, 75Al, Mikes, cables, 15 beam, etc.; CD Viking II Rickey 15 M Heath mobile twins; Ron Rush 80 SSB Heath Hickok, DX-100 and matchbox; Charley Sebree, Tri-Bander and Rotator; McVicker, 6 meter beam; Lee Easley, tents & cots; Jack Wells the 2 field office trailers from the Indiana Ashphalt Company; CD came in with the 100' tower and the EQUIPMENT: Ed White, K8EZQ-Automatic Keyer; Gary Reluctant Draggin.

cream sandwiches Sunday afternoon to everybodys delight, Man you ain't lived till you lived thru a FIELD DAY WITH Cliff Alsop, W9EKD brought over 2 big boxes of ice THE INDIANAPOLIS RADIO CLUB.

HATS OFF TO

Robt. Melton, W9UEU Frank Fitch, W9EJW Hank Wolfla, K9LZJ Dick Shimer, K9VDI Al Minnick, K9SUW R. Kinnett, Kn9UIE Ken Brabec, K9SGV fack Wells, W9EJP A. Pittman, W9IIC Ron Rush, W9TGH Ed White, K8EZQ Ed Ward, W9CRS Bob Good K9PPB

Elmer Taflinger, W9GRN Don Steinberger, K9LNT Doyle McVicker, W9IZV Bob Osterhous, W9PSE Bill Moeller, K9UHW Frank Black, W9MNA Ron Williams, W9JVF Ricky Hibbs, K9KSP Dick Hickok, K9PUI Lee Easley, K9QDR Bert Brouse, K9JSF Pat Husk, K9EUQ Ed Healy, W9FJR

WE THANK YOU ALL!!!!!

operates on 20, CW & Phone, with Apache and NC-300. A new "Ham" in town is Joe Poston, K9GCE. Joe

















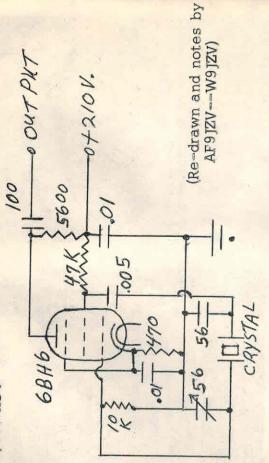
SIX METER OPERATION

Lower Right:

THE HOT 20 METER CW CREW RICKEY AT HIS 15 METER SET-UP

RECOMMENDED OSCILLATOR CIRCUIT

Fundemental type crystals for frequencies 800 KC to 20,000 KC.



The above circuit will provide room temperature stability of a few cycles. Driving power will average about 5 milliwatts. The variable capacitor in the crystal/control grid circuit will enable exact frequency adjustment of the circuit. (Crystal load capacity is approx. 32 mmfd.)

* * * * *

GRAHAMS SPECIALS FOR THE MONTH

	_	_	_		-
\$235.00	\$ 95.00	\$105,00	\$195.00	\$249.00	\$ 88.00
G=50 = Gonset = Fair ====================================	Johnson ChallengerGOOD CONDITION NC-98 National Receiver with Q Multiplier	Johnson 6N2 Transmitter	Drake 1A SSB Receiver	G-28 - Gonset 10 M Tranceiver	Glove Hi Bander (Kit New)

20 YEARS AGO

We spoke of transformers last issue and it wasn't at all unusual to see old pole transformers torn up to get the core which would be recut and stacked to make a new core. The windings in some cases were even hand wound and if you think that isn't something just try handwinding 3 or 4 thousand turns of #20 silk or cotton covered wire. There wasn't even as big a choice in wire coverings at that time. Then when finished units, the winding of the power and filament transformers the chokes came next and swinging chokes as such happened only by accident they were all brute force filters.

In passing it is recalled the first home brew electrolytic condensers. These viewed at W9BHC's ham shack were a stack of 12 aluminum pie pans stacked on 4 saw scored corner sticks so that each nested somewhat in the other but not quite touching and the void was filled with a borax solution or some secret brew of the builders. This affair was across a 500 to 1000 volt generator and did a FB job of taking the commutator ripple out. What a difference in size to the etche and fabricated plate electrolytics of today.

The author recalls his own home made paper filter condensers he made when he couldn't get the 8 bucks to buy 4 mfd 600 Volt sangamous. These condensers were made by dipping theme tablet paper in molten paraffin, letting it harden and redipping. These impregnated sheets were then stacked between sheets of cigarette tin foil, lead foil from tapes etc. with alternate ends becoming the terminals. This mess was then clamped together with strips of wooden cigar box wood and put in the output of the aforementioned slop jars. You should have heard those condensers sing as the pulsating D.C. made them vibrate like electrostatic speakers. Yes, and brave soul, putting the fingers on same you could feel, this pulsing of the dielectric.

With the above home brew equipment the transmitter wasn't a nice desk top cabinet affair, it covered one side of the bedroom. Compare that with a modern transceiver with, receiver, transmitter and their power supplies in a cabinet 8 x 8 x 6. That is inches, not feet, HI....

OUR ADVERTISERS

This is the 6th in our series of stories on our Advertisers who help bring the Ama-Chewer to you.

HAROLD WALLMAN WALLMAN'S PHARMACY

Wall, W9NEU has a quarter century of Hamming under his hat - since getting his ticket in 1935, he doesn't remember how he got this bug - it just happened and was on 5 meters in those early days. (with Fritz VPN)

In 1939 Wall "went into business" with his own drug store at W. 16th Street and Tibbs. It was a new venture in a new store and now after more than 20 years the Wallman Pharmacy enjoys its position for a reliable prescription service. Walls choice of location was a good one and the neighborhood is still growing. As in all "Drug Stores" there is more than drugs and he has it. From his ad you have noticed he has a professional tube checker (which takes some instructing for some customers he says.) There is a well stocked section for Film, Flash Bulbs, Cameras, etc. for you who have the shutter bug virus.

You can stop for a bite and eat too at the shoppers lunch counter - have a malt and start getting fat! Walls son is a graduate pharmacist and works with his dad in the store.

If you stop in to see Wall and he's out - look up on Lake Manaton at his summer home or out on the lake for a Century - with a 112 Horse inboard - (with out radio) he will be cutting Hula Hoops out there.

Back in Indianapolis you'll find W9NEU in his attractive home on N. Kessler Blvd. under a Mosley Tribander with an Elmac rig and a RME 45 receiver on 10 M.

Next time you need film or any of the 1000 of items in stock ask for W9NEU and introduce yourself and tell him "Ama-Chewer" sent you.

CORRECTION (GUESS WE DON'T GET IT ALL STRAIGHT ASST, ED.)

PLEASE NOTE: INDIANA SSB NET MEETS EVERY NIGHT OF THE YEAR AT 7:30 PM, EST, 3920 KC.

PROGRAM REVIEW

The final program meeting of the summer was on a popular subject – SINGLE SIDEBAND and an avid SSB enthusiast, Rolly Boughton, W9PMM was our speaker. A very informative type question and answer meeting was conducted with leading questions from other sideband operators such as Alvey W9JJC. PMM explained that SSB was 4 times more powerful than AM and likewise more efficient ie. for a given power input more speech power is transmitted.

SSB there is less TVI. Phasing rigs seem to provide a better audio quality on SSB and a basic curcuit is shown in March, 1956 QST of an exciter unit, another very popular rig is the W2EWL unit. Because of the nature of the voice peaks and pulses transmitted by SSB the voice peaks and pulses transmitted by SSB the voice peaks and pulses transmitted by SSB amplifiers, light duty power supplies can be used and large capacitor filters with silicone diodes as rectifiers eliminating filament transformers, bulky plate transformers, etc.

These advantages plus running tubes in a grounded grid arrangement to eliminate bias and screen supplies make a KW SSB amplifier with power supply as compact as a standard receiver, truly a table top type kilowatt.

Rolly mentioned the use of sideband slicers and that a BC-453 modified to incorporate a product detector works excellent with older receivers, etc. Remember the main advantage of SSB is to put more QSO's per ham band and if you have listened on 20 they are about every 3 KC---did you ever hear AM stations every 3 KC????

Now that you have heard some of the facts why don't you join the group for frequency saving QSO's?

* * * * *

A NOVICE KILOWATT???

Your publisher has been advised by Gary Hughes, K9LNX and Lee Easley, K9QDR that if would be legal for a novice to run a full gallon under certain conditions. Namely if a transistor could be developed that would handle the power if would be legal for a novice to use it inasmuch as the official FCC rules state that the input to the vacuum tube of the final stage of a xmtr. must not exceed 1000 watts and says nothing about semi-conductors.

FIELD DAY RESULTS OF LOCAL CLUBS

The state of the s	27000					
Club	80M	40M	20M	15M	M9	Total
Allison	1026	120	954	-0-	252	2352
Home Brew	*498	*	*	-0-	969	19
I.R.C.	1590	1182	870	414	606	4965
R.C.A.	-0-	1632	732	-0-	069	3054
W.E.A.R.C.	1080	2142	786	678	1080	5766

*Score is combined operation on 80-40-20 meter bands.

problems of field day but if you thought you had trouble you 5 KW generator, got a late start, couldn't hear anything on supply blew up, etc., etc., so the 10 operators tore down had better talk to Don, W9MHP or some of the boys at the early and didn't remember how many they worked....and mobile club. Seems as though they had carbureator and The above report does not include all of the usual 6 meter halo, Sunday morning the 75 meter rig's power fuel pump problems plus starter motor trouble with the you thought you had trouble?

PLAYING THE GAME

persons with hobbies are better adjusted than those without. A National Recreation Association study shows that accomplish things they haven't had time for in the past. Those with hobbies "take leisure as an opportunity to

WHO'S GOING WHERE ON VACATION

Caskey DNQ, has left on a 10 day camping trip, destination unkown even to Caskey?? Hank LZJ, left July 8th for Wild Rice Lake, Wisc. taking SIXER and 100 Watt 80 meter rig for CW

Northland Lodge at Pelican Lake near Orr, Minn. where he Ben Marcel, K9IUH will soon be returning from The spent his weeks vacation,

HAM ADS

640 N. Somerset Ave. Mrs. Pauline D. Cox MElrose 8-5353

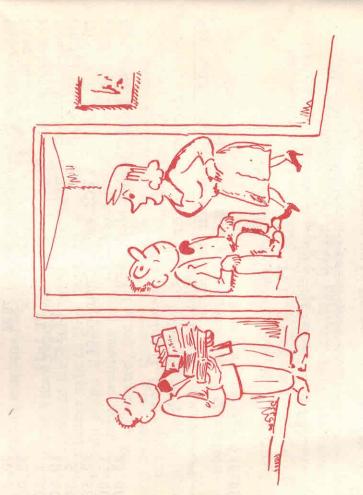
QF-1 Heathkit Q Multiplier-In Good Condition-Both for-FOR SALE: DX-35 Heathkit Transmitter

Thomas D. Marshall, K9OPB Indianapolis 18, Indiana 5619 E. 38th Street

REPORT ON BLIND SCHOOL PROJECT

'uly and took his BC-348 receiver for blind student Ray Warren itching to get to work. He has been busy getting his show to use for the rest of the summer. Ray reported he had not yet heard from the FCC on his novice ticket but was really Caskey, W9DNQ drove up to Dayton, Ind. the 5th of rabbits ready for 4H judging.

Also promised is a surplus cabinet from RCA to house the abov the gear which is a FB power supply for the millen type transmitter for the blind school club project. DNQ has picked up gear. A fine start for the school and many thanks to Jake for north of Cumberland called W9DNQ and said he had a transchasing a receiver so a good start has certainly been made this equipment. Several have offered money towards purmitter which CMQ also gave for the blind school station. Jacob Worley, W9CMQ who recently moved out just towards getting these folks on the air.



I'LL SEE IF I CAN GET ED TO SHOW YOU HIS QSL COLLECTION.

Supplied Sup

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MANNING & SON 4718 BERTHA CH 4 4344

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